## Oilsands Performance Metrics

Audiences and Design Principles



## Introduction

"There is need for a substantive, publicly accessible, cross-government source where evidence on identifying problems and tangible government progress in dealing with those issues can be tracked."

— Royal Society of Canada 1

The majority of oilsands stakeholders want a system for measuring and reporting on performance — environmental, social, and economic — for the oilsands sector and region. The Royal Society of Canada, the Federal Oil Sands Advisory panel, the Government of Alberta, the Pembina Institute, North West Ethical Investments, and many oilsands companies are just some of the organizations that recommend the development of publicly accessible metrics on oilsands performance.<sup>2</sup> In response, several organizations, such as the Canadian Association of Petroleum Producers (CAPP), the Oil Sands Sustainable Development Secretariat and Alberta Environment, are developing or have developed oilsands performance metrics. The Government of Alberta's environmental monitoring panel is currently developing recommendations on how to develop and implement a world-class monitoring, evaluation and reporting system within the province which it will provide to Alberta's Minister of Environment.

With the range of initiatives and broad interest, there is critical need to ensure we have a cross-sectoral understanding of why different stakeholders are interested in oilsands performance metrics and the various expectations, in terms of principles like engagement and transparency, for these metrics. Performance metrics can be powerful tools for identifying issues and solutions, demonstrating and communicating performance and building trust among stakeholders; however, these benefits are only realized when performance metrics are designed to meet the various expectations of the audience.

This Thought Leader Forum is focused on helping build cross-sectoral understanding on expectations for performance metrics related to the oilsands.

#### Forum Objective

To increase awareness and understanding of stakeholder opinions and expectations on oilsands performance metrics to support existing or emerging monitoring and measurement systems.

#### Description of forum

#### **Developing the Thought Leader Forum**

A collaboration of organizations have designed and sponsored the Thought Leader Forum. The Pembina Institute, the Institute for Sustainable Energy, Environment and Economy out of the University of Calgary (ISEEE) and Deloitte executed the design and event planning and will be hosting the event. The Government of Alberta, Suncor and Cenovus funded the development and hosting costs. All of the organizations listed above, along with CAPP, sat on the steering committee for the event. The steering committee provided guidance on the agenda, invitation list and the forum pre-read (this document).



#### Forum details, process and anticipated outcomes

The forum will be held in the Rozsa Centre on the University of Calgary Campus on May 3, 2011. The forum will be a full-day event starting at 8:30 a.m. and running until 4:30 p.m.

Forum participants will focus on two topics:

**Audience for Metrics:** Who are the various audiences for oilsands performance metrics? How will different audiences use the metrics?

**Principles for Metrics:** What guiding principles should metric developers use? How would we recognize if those principles were being met?

Forum participants will discuss these topics in two discussion sessions, in small groups (seven per table), assisted by facilitators. After each session, the facilitators will summarize their table's discussions, and these results will be reviewed with all participants in an open dialogue.

The results from the forum — understanding of audience application and recommended design principles — will be posted publicly and made available to all interested parties. Ideally, those working to design and develop performance metrics will find the results useful and will incorporate them into their design and process. The intent of the forum is NOT to recommend or replace existing initiatives or to recommend specific metrics (e.g. water metrics, criteria air contaminants, etc).

#### What do we mean by oilsands?

For the purposes of our discussion, we are looking at the full fuel cycle of oilsands from an economic, environmental, and social perspective. This includes production (mining and in situ), transportation (pipelines), upgrading, construction, and use of oilsands-derived fuels.

The oilsands region includes the Athabasca, Cold Lake, Peace River and upgrading in Alberta.

The use of performance metrics likely extends beyond the region given the role of oilsands in the national and global economy.

## Objectives of pre-read

This pre-read has two primary objectives:

- To provide every participant with sufficient information to participate in the group discussions around audiences and principles.
- To act as a reference guide during the discussions at the forum.



## Background

Performance metrics are a key element of monitoring, evaluation and reporting systems. In many systems, performance metrics are an attempt to derive meaningful information from vast quantities of monitoring data. The specific metrics depend on what different audiences consider meaningful and could result from objectives, historical context or international benchmarks. For example, companies continuously collect financial data; however, this data is meaningless to many until it is converted to performance metrics like expenses, revenue, shareholder equity, and asset retirement as outlined in corporate financial statements. Industries, governments and non-governmental organizations around the world use performance metrics to identify environmental, social and economic issue areas, measure performance towards solving identified issues, communicate and build trust with stakeholders, and identify business opportunities. Organizations may apply performance metrics reporting guidelines voluntarily, as in the Carbon Disclosure Project or sustainability reports, or in response to mandatory requirements such as, the International Financial Reporting Standard and the National Pollutant Release Inventory. Many companies also use performance metrics internally.

Internationally, the Global Reporting Initiative (GRI) is the most well-known reporting framework that incorporates social, economic and environmental performance metrics. More than 1,000 companies use the GRI reporting framework worldwide.

Many organizations are already reporting on or developing oilsands performance metrics in Alberta. The tables below summarize existing and emerging initiatives, which can include environmental, social and financial metrics.

#### Performance metric definition

For the purposes of this forum a performance metric is any quantitative **environmental**, **social** or **economic** information that can be measured, reported and tracked over time. It could include raw data like total water use, or some form of modified data like life cycle greenhouse gas emissions. We'll consistently use the term performance metric; however our definition also encompasses indicators, sustainability reporting, triple-bottom-line reporting, integrated reporting or oilsands reporting in general.



### Examples of existing initiatives

The Government of Alberta, several partnership organizations, oilsands companies and the Canadian Association of Petroleum Producers are reporting on oilsands performance metrics or reporting data that could be used for such metrics. Some of these sources are discussed briefly in Figure 1.

Figure 1. Existing initiatives towards developing oilsands metrics

Government and partnership data collection	Who? What? Stage? Where?	The Government of Alberta and several partnership organizations like the Reginal Aquatics Monitoring Program, the Wood Buffalo Environmental Association, the Cumulative Effects Management Association, the Lower Athabasca Regional Plan and the Alberta Biodiversity Monitoring Institute.  A broad set of data including local, regional and provincial environmental, social and economic data.  Existing Information is stored by a number of different organizations and government departments
Company required reporting	Who? What? Stage? Where?	The Government of Alberta requires oilsands companies to report on a wide range of environmental, social and economic data Aggregated oilsands data for environmental and social metrics Existing Information is stored by a number of different organizations and government departments
Company voluntary sustainability and financial reports	Who? What? Stage? Where?	Oilsands companies report a range of information.  The type and quality of metrics varies by company. Some report on environmental, social and financial metrics.  Depends on the company, some report on a wide range of environmental, social and economic metrics.  Company reports are available online; for example, Suncor or Shells reports. <sup>3</sup>
Responsible Canadian Energy: Oilsands Progress Report	Who? What? Stage? Where?	The Canadian Association of Petroleum Producers Aggregated oilsands data for environmental and social metrics First report available publicly. CAPP intends to refine future reports based on stakeholder feedback. CAPPs website

Figure 1 provides a short list of initiatives in Alberta that collect data and/or report on performance metrics. The breadth and depth of data these initiatives collect is vast and will not be discussed in more detail in this paper. For more information consult the websites of the organizations listed above or check www.oilsandsmetrics.ca/resources. html.



## **Emerging initiatives**

In addition to existing initiatives, several other initiatives to develop oilsands performance metrics are emerging. A few of these initiatives are discussed briefly below.

Figure 2. Emerging initiatives towards developing oilsands metrics 4,5

Oilsands Portal	Who? What? Stage? Where?	Led by Alberta Environment Publicly accessible one-stop shop for all reported environmental data. Focuses on cumulative effects on air, land, water, climate change and biodiversity. Active construction, release expected in summer 2011. Available online, website currently not public
Performance Measures	Who? What? Stage? Where?	Oil Sands Sustainable Development Secretariat The project includes measures to: optimize economic growth, reduce environmental footprint and increase quality of life. Currently in the performance measures refinement and data collection phases Performance measures will be incorporated into future <i>Responsible Actions: A Plan for Alberta's Oil Sands</i> Interim and Annual Progress Reports
Oil Sands Leadership Initiative	Who? What? Stage? Where?	The Government of Alberta requires oilsands companies to report on a wide range of environmental, social and economic data Aggregated oilsands data for environmental and social metrics Existing Information is stored by a number of different organizations and government departments
Provincial Environmental Monitoring Panel	Who? What? Stage? Where?	The Government of Alberta Expert panel to provide recommendations to the Minister of the Environment on the development of a provincial-scale world-class environmental monitoring, evaluation and reporting system.  Panel will report back in June 2011 Terms of reference available at http://environment.alberta.ca/03289.html



## Audiences: Understanding multiple uses of oilsands metrics

Developing successful performance metrics requires first knowing what audiences the metrics are for and then understanding what performance means to those audiences. In the case of the oilsands, the audience includes international, national, provincial and local businesses, governments, non-governmental organizations, academia and the general public. Each of these audiences has its own unique perspectives on what performance means. In this section of the pre-read we explore the general value of performance metrics, select audiences for oilsands metrics and briefly consider each audience's interest areas.

#### Value of metrics

Most organizations operating in, regulating, critiquing or impacted by oilsands development agree with the concept of oilsands performance metrics. Metrics can help identify and manage environmental, social and economic issues, communicate the risks and benefits of oilsands development, demonstrate that performance aligns with desired outcomes and strengthen relationships with interested stakeholders. The Royal Society of Canada, the Canadian Association of Petroleum Producers, the federal Oil Sands Advisory panel, the Government of Alberta, the Pembina Institute, North West Ethical Investments, and many oilsands operators are just some of the organizations that recommend the development of public oilsands performance metrics.<sup>6</sup>

#### Suncor story

"Suncor uses the GRI framework to report on environmental, social and economic data for its oilsands operations. In 2009, we created a separate in-situ business and as a result we have disaggregated environmental and social data for both mining and in situ operations. The performance metrics give us a unique way to look for improvement opportunities in environmental, social and economic performance. In addition, we've used our performance indicators to engage in more meaningful conversations with our stakeholders, and establish the only public air, water and energy efficiency targets in the oilsands industry. It would have been impossible to establish these targets without performance metrics"

— Peter MacConnachie, senior sustainability issues management specialist, Suncor Energy Inc.



These organizations and others make this recommendation because performance metrics are an essential ingredient to improving oilsands performance. As many say, "you can't manage what you don't measure". Specifically they can assist in the following three areas:

**Measurement and management:** Performance metrics enable the oilsands industry, the Government of Alberta and the Government of Canada to identify areas for improvement, measure progress and evaluate performance in the context of desired outcomes. Identifying improvement areas also helps focus research efforts.

**Communication:** Performance metrics provide information for different sectors to discuss and engage on challenges and solutions.

**Strengthen relationships:** The process of developing, implementing and maintaining performance metrics can help build trust and understanding amongst oilsands stakeholders.

#### Potential audiences for metrics

Performance metrics, whether financial, social or environmental, are often designed for a specific audience, but are used by a wide range of audiences. For example, financial reporting is designed primarily to meet the needs of investors, but the reports themselves are used by a range of different audiences.<sup>7</sup>

We have identified eight primary audiences for oilsands metrics:

- the oilsands industry,
- · governments (federal, provincial and municipal),
- financial community
- international governments,
- academia,
- · aboriginal communities,
- affected landowners
- not-for-profits.

This is intended as a preliminary audience list for forum participants to expand on. Each of these audiences has its unique interest areas and will use reported metrics for different purposes. For example, a public health not-for-profit may be most concerned about regional health and potential health impacts from oilsands development, and may use regional reporting to focus its efforts. An oilsands company, while concerned about regional health impacts, would likely be more interested in understanding the contribution of its own operations to the impacts and in identifying mitigation options.

Figure 3 summarizes the different audiences and their respective interest areas relative to performance in the oilsands. This is a preliminary list only and is intended as a starting point for discussion at the forum. The information contained in Figure 3 is primarily based on Pembina's interviews with stakeholders regarding oilsands performance metrics, supplemented by the views of the forum steering committee.



Figure 3. Uses of performance metrics, by audience

#### For research in environmental, social · Baseline for measuring improvements and economic fields **Oilsands** Credible data to communicate results Academia · For technical research and Transparent information to comment Industry development · Identify funding priorities. · Quantitative data to measure key · Reassure communities on the safety environmental, social and economic of air, land, water and food in the metrics region, or highlight potential health **Aboriginal** Government · Building trust and understanding and environmental concerns **Communities** between all stakeholders Evaluating appropriate economic Measuring performance against development desired outcomes Maintaining access to traditional lands Understanding the full risks and Understanding impact on local **Financial** benefits of oilsands projects Local environment, social and economic · Inform investors of risks concerns like jobs, air, land and water Community **Communities** Make investment decisions quality and support. Ensuring foreign energy production aligns with domestic policies and Dependant on type of NGO societal values · Identifying and highlighting issue Understanding positive and negative International **Not-for-Profits** cross border issues with oilsands · Advocating for policies and regulations development Negotiating with companies Supporting energy security and job creation

In general, all audiences are interested in improving environmental, social and economic performance in the oilsands. However, the types of information they are interested in can vary significantly, and each audience can use public performance metrics in different ways based on their own interests.



## Challenge questions

The discussion on audiences will focus on the following questions, which we invite forum participants to consider in advance of the forum.

- Do our eight primary audiences capture the full range of audiences? If not, what other audiences should be added?
- What type of information is of interest and useful to each audience? Consider the differences between international, national, regional and local metrics and what 'environmental, financial and social' means to different audiences.
  - Example: How useful are facility-level performance metrics for an international government making decisions on energy supply?
- How will different audiences use the information made available through metrics?
  - Example: Will the financial community use financial reporting data in the same way as a not-for-profit?



# Developing a shared set of guiding principles

In the absence of generally accepted standards for measuring and reporting non-financial (i.e., environmental and social) performance,<sup>8</sup> those interested in developing and reporting non-financial performance are left to develop their own principles and guidelines. Those developing performance metrics for the oilsands must consider the full breadth of audiences and their expectations of performance metrics. Fortunately, several organizations including the GRI, CAPP, the Government of Alberta and the Oil Sands Research and Information Network have developed guiding principles for their respective initiatives. The purpose of this section of the pre-read and the discussion at the forum is to determine collectively what the primary principles are and what those principles mean. For example, it may be easy to agree to the principle of transparency but difficult to agree on what level of transparency is sufficient.

## GRI story: Developing sector supplements

The GRI creates sector supplements when there is a need, a clear opportunity to improve performance and the potential to increase the number and quality of reports in the sector. The process takes more than two years and includes a multi-stakeholder working group, public commentary, technical review and board review.9



Working Group drafts Sector Supplement

Sector Supplement is released for Public Comment Period

Working Group reviews feedback from public and finalizes Sector Supplement

GRI governance bodies approve Sector Supplement

Sector Supplement is available from GRI website as free download



## Principles for design and process

We synthesized 11 principles for design and process from those proposed by the Government of Alberta, OSRIN, Alberta Innovates, the GRI, IPIECA, Pembina's survey of stakeholder opinions on oilsands metrics and the Landscape of Integrated Reporting. <sup>10</sup> The 11 principles are provided below, along with short definitions.

Figure 4. Principles for performance metric development and reporting

Relevant	The performance metrics must be meaningful to the intended (and unintended) audiences.
Stakeholder Engagement	Stakeholder are engaged throughout the development and reporting processes.
Transparent	Sufficient information should be provided to allow third-party review.
Funding & Commitment	Participants should be sufficiently funded and committed to the process.
Reliable & Accurate	Audiences should be able use the information for its intended purpose.
Independence & Trust	Audiences must trust the information source, which often requires independence.
Clear	All audiences should be able to understand and apply the metrics or the reporting results.
Flexible	The system must be able to incorporate metrics over time to remain credible.
Linked to change	Performance reporting must be linked to change, whether institutional or behavioural.
Clear interlinkages	The connections between environmental, social and economic performance should be clear.
Consistent	Metrics should be reported consistently to allow for comparisons over time and between sectors.



The principles outlined above are common guiding principles in many performance metric programs; however, providing a short definition is far simpler than defining *how* to achieve the principles. For example, most groups will agree that relevant metrics are important, but how do we determine relevance? Determining relevance requires consideration of topics like the following:

- Relevant to which groups?
- Relevant based on subjective or objective information?
- How should the relevance of environmental, social and economic considerations be weighted?

In this process, stakeholder concerns are weighted with the significance of the economic, environmental and social impact. Significant stakeholder concerns that also have significant economic, environmental and social impacts are given higher priority as material topics.

During the forum, participants will share their perspectives on what guiding principles should be applied and how they can be met.

#### Challenge questions

The discussion on principles will focus on the following questions, which forum participants should consider in advance of the forum.

- What are your top five principles and why? Can some be combined, edited, removed?
- For your top five, what do each of the principles mean to you? How would you recognize that each principle has been implemented or fulfilled (i.e. how do you make them real)?

## More information

Looking for more information? Check the additional resources section of the forum's website, available here: http://www.oilsandsmetrics.ca/resources.html.



## **Endnotes**

- 1 Royal Society of Canada, Environmental and Health Impacts of Canada's Oil Sands Industry (2010), 438, http://www.rsc.ca/documents/RSCreportcompletesecured9Mb\_Mar28 11.pdf.
- Royal Society of Canada, Environmental and Health Impacts of Canada's Oil Sands Industry, 438. RSC found that tangible improvements could be made to environmental assessments by "implementing a central repository of regional environmental, community health, and infrastructure data that provides effective public access." North West Ethical Investments recommends that oilsands companies include public disclosure material information on ESG strategy, performance and risk mitigation systems and engage in constructive dialogue with concerned shareholders, in their benchmarking report Lines in the Sands report (Northwest & Ethical Investments. Lines in the Sands: Oil Sands Sector Benchmarking (2009) http://www.ethicalfunds.com/SiteCollectionDocuments/docs/lines\_in\_the\_sands\_full.pdf).

  CAPP (Canadian Associatin of Petroleum Producers, Responsible Canadian Energy: Oil Sands Progress Report (2009), 50, http://issuu.com/capp/docs/rce-oilsands-report?mode=embed&layout=http://skin.issuu.com/v/light/layout.xml&showFlipBtn=true). and Suncor (Suncor Energy, 2009 Summary Report on Sustainability (2009), http://www.suncor.com/pdf/2009\_Report\_on\_Sustainability\_Summary.pdf) both report on oilsands performance metrics. The Pembina Institute released two reports on environmental performance metrics for the oilsands, both available online: http://www.pembina.org/pub/1571 and http://www.pembina.org/pub/1981
- 3 Suncor Energy, 2010 Report on Sustainability (2011) http://www.suncor.com/en/responsible/1434.aspx or Shell Inc. Shell Sustainability Report 2010 (2011) http://www.shell.com/home/content/environment\_society/reporting/s\_reports/
- 4 Government of Alberta, "Province advances land reclamation programs," news release, January 2011, http://www.alberta.ca/acn/201103/30079C433FD78-A16A-B3F8-76EA527E7353E6C5.html.
- 5 The Energy Resources Conservation Board, the Alberta Department of Energy, Alberta Sustainable Resource Development and Environment Canada support Alberta Environment's oilsands portal.
- RSC in Environmental and Health Impacts of Canada's Oil Sands Industry found that tangible improvements could be made to environmental assessments by "implementing a central repository of regional environmental, community health, and infrastructure data that provides effective public access." North West Ethical Investments recommends that oilsands companies include public disclosure material information on ESG strategy, performance and risk mitigation systems and engage in constructive dialogue with concerned shareholders, in their benchmarking report Lines in the Sands report.
- 7 Robert Eccles, Beiting Cheng and Daniela Saltzman, eds., *The Landscape of Integrated Reporting: Reflections and Next Steps*, (Harvard Business School, 2010), http://hbswk.hbs.edu/pdf/The\_Landscape\_of\_Integrated\_Reporting.pdf.
- 8 Ibio
- 9 Global Reporting Initiative, GRI Sector Supplement (2010), http://www.globalreporting.org/NR/rdonlyres/F6D8F94E-F810-4C1F-87C9-D5F0702A3EB3/2981/ SSL eaflet GRI 2009 FINAL 1.pdf.
- 10 Global Reporting Initiative, Sustainability Reporting Guidelines (2011), http://www.globalreporting.org/NR/rdonlyres/660631D6-2A39-4850-9C04-57436E4768BD/0/G31GuidelinesinclTechnicalProtocolFinal.pdf; Government of Alberta, Provincial Environmental Monitoring Panel For Monitoring Evaluation & Reporting for the Lower Athabasca River: Terms of Reference (2010), http://environment.alberta.ca/documents/Environmental\_Monitoring\_Panel\_\_TOR\_December\_2010.pdf; Alberta Innovates Energy and Environment Solutions, summary notes from Alberta Oil Sands Sustainability Reporting Initiative Workshop, January 11, 2011, Calgary, AB; Eccles et al., editors, The Landscape of Integrated Reporting: Reflections and Next Steps.

